ABSTRACT OF THE DISCLOSURE

An apparatus for branch prediction includes a history register which stores therein history of previous branch instructions, an index

5 generation circuit which generates a first index from an instruction address and the history stored in the history register, a history table which stores therein a portion of the instruction address as a tag and a first value indicative of likelihood

10 of branching in association with the first index, a branch destination buffer which stores therein a branch destination address or predicted branch destination address of an instruction indicated by the instruction address and a second value

15 indicative of likelihood of branching in association with a second index that is at least a portion of the instruction address, and a selection unit which makes a branch prediction by selecting one of the first value and the second value.